

Table S4. Effect of supplementation of basal diet (CTRL) with 40% isoflavone extract (EXP) on characteristics of the rumen milieu of dairy cows.

| | | CTRL | EXP | SEM | P |
|------------------------|------|--------|--------|--------|--------|
| pH | | 6.56 | 6.77 | 0.081 | 0.098 |
| Ammonia | g/L | 0.07 | 0.06 | 0.012 | 0.055 |
| Acetic acid | g/L | 1.89 | 1.56 | 0.044 | <0.001 |
| Propionic acid | g/L | 0.84 | 0.70 | 0.028 | 0.005 |
| Butyric acid | g/L | 0.74 | 0.64 | 0.039 | 0.079 |
| Total VFA ¹ | g/L | 3.64 | 3.05 | 0.098 | 0.002 |
| Daidzein | µg/L | 21.06 | 119.99 | 19.616 | 0.005 |
| Glycitein | µg/L | 0.08 | 0.71 | 0.492 | 0.397 |
| Genistein | µg/L | 0.52 | 0.97 | 0.218 | 0.169 |
| Equol | µg/L | 337.91 | 662.55 | 65.718 | 0.006 |
| Total isoflavones | µg/L | 359.67 | 784.33 | 73.749 | 0.002 |

¹ Total volatile fatty acids (VFA) includes also minor VFA (i-propionic, i-butyric, i-valeric, and valeric acids)